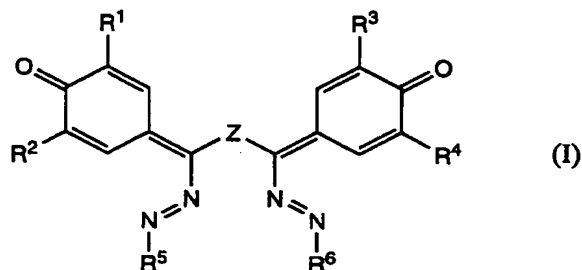
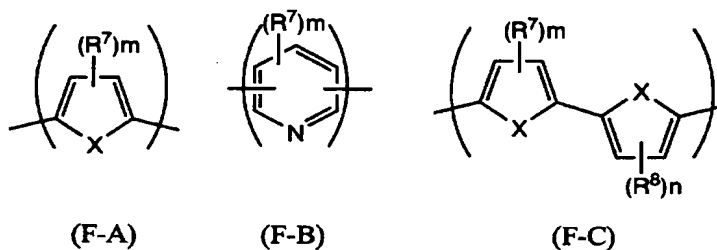


## CLAIMS

1. A novel compound which is characterized by having a structure represented by the following general formula (I):



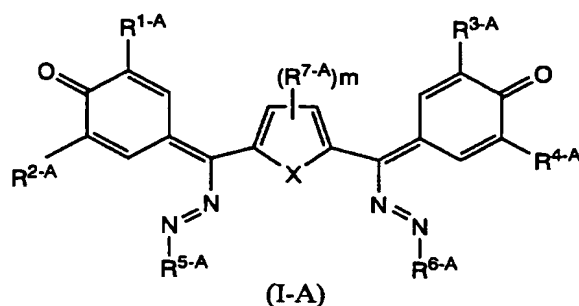
(in the general formula (I),  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group;  $R^5$  and  $R^6$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; Z represents a structure represented by the following general formula (F-A), (F-B) or (F-C):



(in the formulae,  $R^7$  and  $R^8$  may be the same or different and each represents an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $\underline{m}$  and  $\underline{n}$  each represents an integer of from 0 to 2; X represents a sulfur atom or an oxygen atom; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring); and the substituents each represents

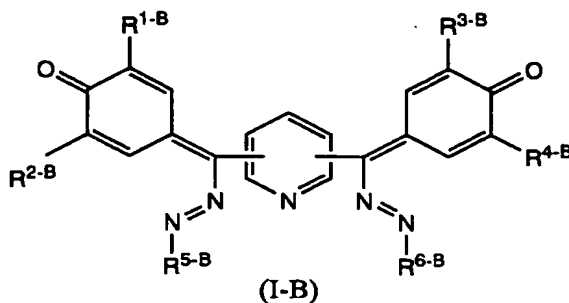
a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring).

2. The novel compound according to claim 1, having a structure represented by the following general formula (I-A):



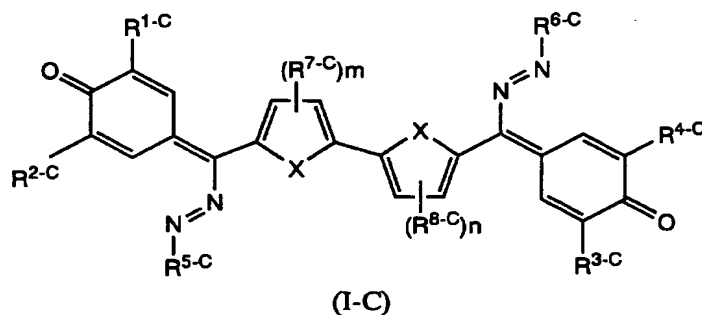
(in the formula (I-A),  $R^{1-A}$ ,  $R^{2-A}$ ,  $R^{3-A}$ , and  $R^{4-A}$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group;  $R^{5-A}$  and  $R^{6-A}$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group;  $R^{7-A}$  represents an optionally substituted alkyl group having from 1 to 12 carbon atoms; X represents a sulfur atom or an oxygen atom;  $m$  represents an integer of from 0 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group having from 1 to 6 carbon atoms, an aryl group, a halogenated alkyl group having from 1 to 6 carbon atoms, or an alkoxy group having from 1 to 6 carbon atoms.)

3. The novel compound according to claim 1, having a structure represented by the following general formula (I-B):



(in the formula (I-B),  $R^{1-B}$ ,  $R^{2-B}$ ,  $R^{3-B}$ , and  $R^{4-B}$  may be the same or different and each represents a hydrogen atom or an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $R^{5-B}$  and  $R^{6-B}$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; and the substituents each represents a halogen atom, an alkyl group, an alkoxy group, an aryl group, a heterocyclic group, a fluorinated alkyl group, or a nitro group, and the substituents may be taken together to form a ring.)

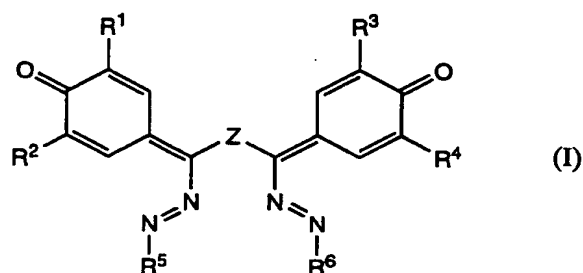
4. The novel compound according to claim 1, having a structure represented by the following general formula (I-C):



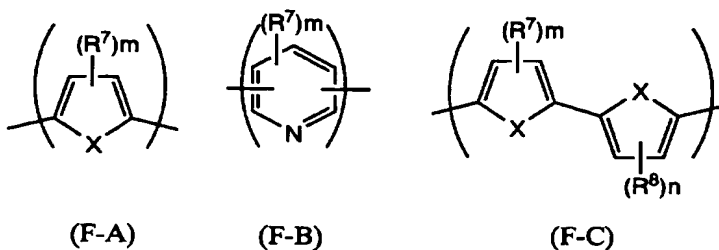
(in the formula (I-C),  $R^{1-C}$ ,  $R^{2-C}$ ,  $R^{3-C}$ , and  $R^{4-C}$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 6 carbon atoms, or an optionally substituted aryl group;  $R^{5-C}$  and  $R^{6-C}$  may be the same or different and each represents an optionally substituted aryl group or a heterocyclic group;  $R^{7-C}$  and  $R^{8-C}$  each represents a hydrogen atom or an optionally substituted alkyl

group having from 1 to 10 carbon atoms; X represents a sulfur atom or an oxygen atom;  $\underline{m}$  and  $\underline{n}$  each represents an integer of from 1 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring.)

5. An electrophotographic photoreceptor including an electrically conductive substrate having thereon a photosensitive layer containing a charge generation substance and a charge transport substance, which is characterized by containing, as said charge transport substance, at least one kind of a compound having electron transport properties as represented by the following general formula (I):

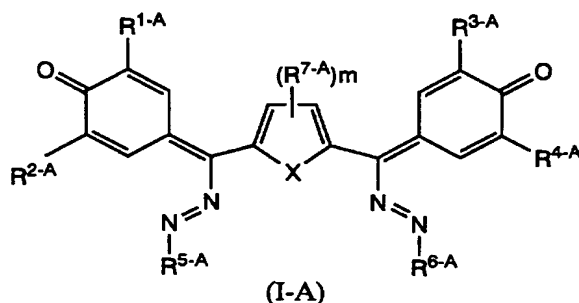


(in the general formula (I),  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group;  $R^5$  and  $R^6$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; Z represents a structure represented by the following general formula (F-A), (F-B) or (F-C):



(in the formulae,  $R^7$  and  $R^8$  may be the same or different and each represents an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $m$  and  $n$  each represents an integer of from 0 to 2;  $X$  represents a sulfur atom or an oxygen atom; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring); and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring).

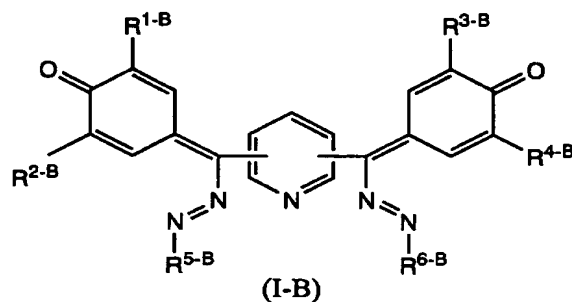
6. The electrophotographic photoreceptor including an electrically conductive substrate having thereon a photosensitive layer containing a charge generation substance and a charge transport substance according to claim 5, which is characterized by containing, as said charge transport substance, at least one kind of a compound having electron transport properties as represented by the following general formula (I-A):



(in the formula (I-A),  $R^{1-A}$ ,  $R^{2-A}$ ,  $R^{3-A}$ , and  $R^{4-A}$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group;  $R^{5-A}$  and  $R^{6-A}$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group;  $R^{7-A}$  represents an optionally substituted alkyl group

having from 1 to 12 carbon atoms; X represents a sulfur atom or an oxygen atom; m represents an integer of from 0 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group having from 1 to 6 carbon atoms, an aryl group, a halogenated alkyl group having from 1 to 6 carbon atoms, or an alkoxy group having from 1 to 6 carbon atoms.)

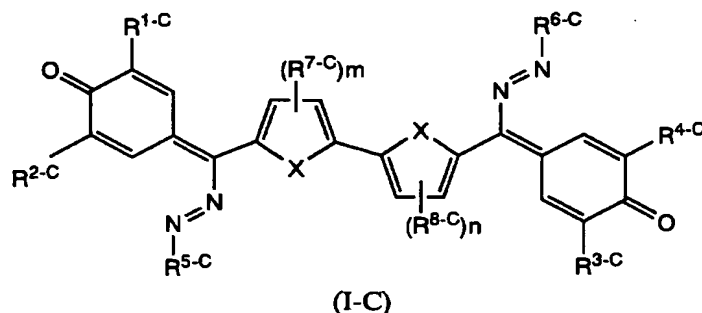
7. The electrophotographic photoreceptor including an electrically conductive substrate having thereon a photosensitive layer containing a charge generation substance and a charge transport substance according to claim 5, which is characterized by containing, as said charge transport substance, at least one kind of a compound having electron transport properties as represented by the following general formula (I-B):



(in the formula (I-B),  $R^{1-B}$ ,  $R^{2-B}$ ,  $R^{3-B}$ , and  $R^{4-B}$  may be the same or different and each represents a hydrogen atom or an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $R^{5-B}$  and  $R^{6-B}$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; and the substituents each represents a halogen atom, an alkyl group, an alkoxy group, an aryl group, a heterocyclic group, a fluorinated alkyl group, or a nitro group, and the substituents may be taken together to form a ring.)

8. The electrophotographic photoreceptor including an electrically conductive substrate having thereon a photosensitive layer containing a charge generation

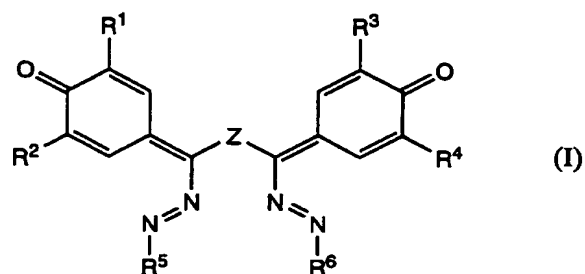
substance and a charge transport substance according to claim 5, which is characterized by containing, as said charge transport substance, at least one kind of a compound having electron transport properties as represented by the following general formula (I-C):



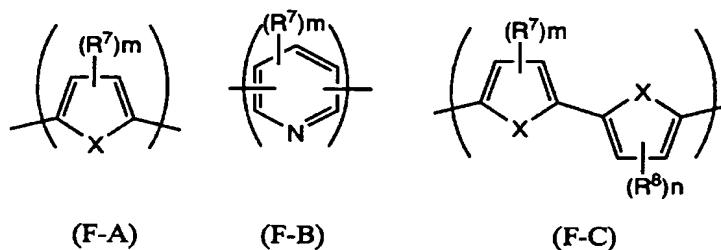
(in the formula (I-C),  $R^{1-C}$ ,  $R^{2-C}$ ,  $R^{3-C}$ , and  $R^{4-C}$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 6 carbon atoms, or an optionally substituted aryl group;  $R^{5-C}$  and  $R^{6-C}$  may be the same or different and each represents an optionally substituted aryl group or a heterocyclic group;  $R^{7-C}$  and  $R^{8-C}$  each represents a hydrogen atom or an optionally substituted alkyl group having from 1 to 10 carbon atoms; X represents a sulfur atom or an oxygen atom;  $\underline{m}$  and  $\underline{n}$  each represents an integer of from 1 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring.)

9. An electrophotographic photoreceptor including an electrically conductive substrate having thereon directly or via undercoat layer a single layer type photosensitive layer containing a charge generation substance, a charge transport substance, and a resin binder, which is characterized by containing, as said charge transport substance, a hole transport substance and at least one kind of a compound having electron transport properties as represented by the following general formula

(I):



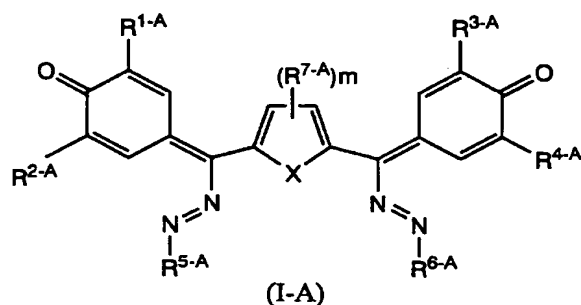
(in the general formula (I),  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group;  $R^5$  and  $R^6$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; Z represents a structure represented by the following general formula (F-A), (F-B) or (F-C):



(in the formulae,  $R^7$  and  $R^8$  may be the same or different and each represents an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $\underline{m}$  and  $\underline{n}$  each represents an integer of from 0 to 2; X represents a sulfur atom or an oxygen atom; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring); and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring).



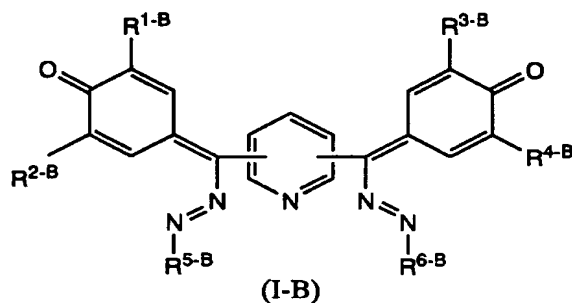
10. The electrophotographic photoreceptor including an electrically conductive substrate having thereon directly or via undercoat layer a single layer type photosensitive layer containing a charge generation substance, a charge transport substance, and a resin binder according to claim 9, which is characterized by containing, as said charge transport substance, a hole transport substance and at least one kind of a compound having electron transport properties as represented by the following general formula (I-A):



(in the formula (I-A), R<sup>1-A</sup>, R<sup>2-A</sup>, R<sup>3-A</sup>, and R<sup>4-A</sup> may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 12 carbon atoms, or an optionally substituted aryl group; R<sup>5-A</sup> and R<sup>6-A</sup> may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; R<sup>7-A</sup> represents an optionally substituted alkyl group having from 1 to 12 carbon atoms; X represents a sulfur atom or an oxygen atom; m represents an integer of from 0 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group having from 1 to 6 carbon atoms, an aryl group, a halogenated alkyl group having from 1 to 6 carbon atoms, or an alkoxy group having from 1 to 6 carbon atoms.)

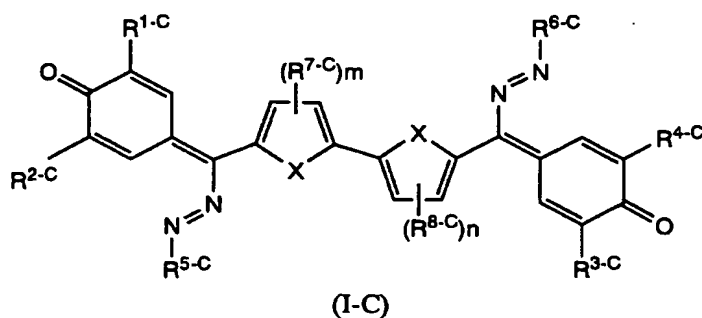
11. The electrophotographic photoreceptor including an electrically conductive substrate having thereon directly or via undercoat layer a single layer type photosensitive layer containing a charge generation substance, a charge transport

substance, and a resin binder according to claim 9, which is characterized by containing, as said charge transport substance, a hole transport substance and at least one kind of a compound having electron transport properties as represented by the following general formula (I-B):



(in the formula (I-B),  $R^{1-B}$ ,  $R^{2-B}$ ,  $R^{3-B}$ , and  $R^{4-B}$  may be the same or different and each represents a hydrogen atom or an optionally substituted alkyl group having from 1 to 12 carbon atoms;  $R^{5-B}$  and  $R^{6-B}$  may be the same or different and each represents an optionally substituted aryl group or an optionally substituted heterocyclic group; and the substituents each represents a halogen atom, an alkyl group, an alkoxy group, an aryl group, a heterocyclic group, a fluorinated alkyl group, or a nitro group, and the substituents may be taken together to form a ring.)

12. The electrophotographic photoreceptor including an electrically conductive substrate having thereon directly or via undercoat layer a single layer type photosensitive layer containing a charge generation substance, a charge transport substance, and a resin binder according to claim 9, which is characterized by containing, as said charge transport substance, a hole transport substance and at least one kind of a compound having electron transport properties as represented by the following general formula (I-C):



(in the formula (I-C),  $R^{1-C}$ ,  $R^{2-C}$ ,  $R^{3-C}$ , and  $R^{4-C}$  may be the same or different and each represents a hydrogen atom, an optionally substituted alkyl group having from 1 to 6 carbon atoms, or an optionally substituted aryl group;  $R^{5-C}$  and  $R^{6-C}$  may be the same or different and each represents an optionally substituted aryl group or a heterocyclic group;  $R^{7-C}$  and  $R^{8-C}$  each represents a hydrogen atom or an optionally substituted alkyl group having from 1 to 10 carbon atoms; X represents a sulfur atom or an oxygen atom;  $\underline{m}$  and  $\underline{n}$  each represents an integer of from 1 to 2; and the substituents each represents a halogen atom, a nitro group, an alkyl group, an aryl group, a heterocyclic group, a halogenated alkyl group, or an alkoxy group, and the substituents may be taken together to form a ring.)

13. An electrophotographic apparatus which is characterized by being provided with the electrophotographic photoreceptor according to any one of claims 5 to 12 and performing a charge process by a positive charge process.